



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,687	05/16/2001	Corinne Rosier	208557US2	9203
22850	7590	07/21/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,687

Applicant(s)

ROSIER ET AL.

Examiner

Derrick W. Ferris

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-11 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 3-6,12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. This Office action is in response to applicant's paper filed 5/9/2005. **Claims 1-18** as amended are still in consideration for this application. Applicant has amended claims 1-18.

Applicant has canceled no claims. Applicant has added no claims.

2. Examiner **withdraws** the objection to the specification and thanks applicant for making the changes to the abstract.

3. Examiner **withdraws** the claim objection(s).

4. Examiner does **not withdraw** the anticipated rejection to *Ott*. The following comments fully address applicant's arguments with respect to the rejection. Applicant's arguments filed 5/9/2005 have been fully considered but they are not persuasive. In particular, applicant argues that *Ott* does not teach inclusion or exclusion of identifiers with each data packet transmitted. Examiner respectfully disagrees. Applicant defines explicit packets as packets that are transmitted with identifiers and implicit packets as packets that are transmitted without being accompanied by identifiers, see e.g., applicant's specification at page 3 line 32 – page 4, line 3. Applicant further teaches that an example of an identifier is a "sequence number", see e.g., page 2, first full paragraph. As such, examiner agrees with applicant that *Ott* teaches a method of dynamically selecting the type of error encoding based on the signal transmission/reception conditions, see e.g., column 3, lines 1-11 of *Ott*. In particular, the error encoding schemes chosen are e.g., shown in Table 1 which include CRC, RS, and RS+ARQ. Specifically, CRC and RS do not require sequence numbers but RS+ARQ does since ARQ is a re-transmission scheme (i.e., note that applicant's own specification at page 2, lines 2-13 teach the above concept

Art Unit: 2663

with respect to ARQ and packet identifiers). As such, when the RS+ARQ transmission scheme is selected an explicit mode or explicit packet is taught. Thus the above limitation is met and the rejection is maintained.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1, 2, 9, 16-18** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent No. 6,182,264 B1 to *Ott*.

As to **claim 1**, see e.g., figure 1 where an explicit packet is taught when encoded using coder RS+ARQ coder 104 and an implicit packet is taught when encoded using RS coder 103 or CRC coder 102 (i.e., note that coder 103 does not use ARQ or a packet identifier). The receiver makes a selection based on the quality of the received information in selecting the coding format which further teaches a transfer stage, see e.g., column 7, lines 25-44. In other words, the teachings suggest that the predetermined transfer criterion is the observed signal quality and the detected error rate, see e.g., column 5, lines 44-56.

As to **claim 2**, in order to establish a rate such as at least an error rate, a variable must be maintained.

As to **claims 16-18**, see similar rejection to claim 1.

As to **claim 9**, see similar rejection to claim 1 where the external event is e.g., the error performance, see e.g., column 3, lines 24-55.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 7, 10, 14, and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,182,264 B1 to *Ott* in view of “Data and Computer Communications” to *William Stallings* (“*Stallings*”).

As such to **claim 7**, *Ott* discloses ARQ but may not teach the fundamentals of ARQ. Thus, *Ott* is silent or deficient to the further limitations with respect to ARQ.

Stallings teaches the further recited limitation above at e.g., at pages 159-176. In particular, with respect to a conventional acknowledgement, see e.g., the section on page 163 with respect to sliding-window protocol. One example of an advance acknowledgement message is a receiver not ready (RNR) message.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Ott* by clarifying that details or the ARQ method.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be for error and

Art Unit: 2663

flow control. In particular, *Stallings* cures the above-cited deficiency by providing a motivation found at e.g., page 158 with respect to data link control. Second, there would be a reasonable expectation of success since both references teach ARQ. Thus the references either in singular or in combination teach the above claim limitation(s).

As to **claim 10**, in addition to the reasoning provided for claim 7, see e.g., using a sliding window as taught by *Stallings* where the parameters of the window are EoW and BoW. In addition, the ARQ method sends acknowledgements sequentially, see e.g., page 173.

As to **claim 14**, see similar reasoning to the rejection for claim 7.

As to **claim 15**, see similar reasoning to the rejection for claim 7.

9. **Claims 8 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,182,264 B1 to *Ott* in view of "Data and Computer Communications" to *William Stallings* ("*Stallings*") in further view of "ARQ Error Control for Fading Mobile Channels" to *Zorzi et al.* ("*Zorzi*").

As to **claim 8**, in addition to the reasoning provided for claim 7, *Ott* and *Stallings* may be further silent or deficient to a clock and the states associated with a clock. *Zorzi* teaches the above limitations since *Zorzi* teaches ARQ where the states of a clock are taught as the combination of ARQ and the timer as taught by the reference. Hence examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to teach a clock associated with ARQ. In particular, one skilled in the art prior to applicant's invention would have been motivated to use a clock to avoid lost feedbacks. As such, *Zorzi* teaches the above motivation e.g., at page 446.

Art Unit: 2663

As to **claim 11**, the ARQ method sends acknowledgements sequentially, see e.g., page 173. With respect to a clock, see similar reasoning in the rejection for claim 8.

Allowable Subject Matter

10. **Claim 3-6, 12, and 13** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.


Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


RICKY NGO
PRIMARY EXAMINER

7/10/07